

## INTERNATIONAL SEARCH REPORT

 Int. Application No  
 PCT/IB2004/004069

 A. CLASSIFICATION OF SUBJECT MATTER  
 IPC 7 C30B29/04

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

 Minimum documentation searched (classification system followed by classification symbols)  
 IPC 7 C30B A44C

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 03/014427 A (APOLLO DIAMOND, INC) 20 February 2003 (2003-02-20) the whole document	1-53
X	US 2003/205190 A1 (LINARES ROBERT C ET AL) 6 November 2003 (2003-11-06) paragraph '0070!	30,31
Y	US 6 187 213 B1 (SMITH JAMES GORDON CHARTERS ET AL) 13 February 2001 (2001-02-13) examples 1,2	30,31
Y	US 4 316 385 A (DEVRIES ET AL) 23 February 1982 (1982-02-23) column 2, line 23 - line 62	30,31
-/--		

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

## \* Special categories of cited documents:

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- \*G\* document member of the same patent family

Date of the actual completion of the international search

14 April 2005

Date of mailing of the international search report

26/04/2005

 Name and mailing address of the ISA  
 European Patent Office, P.B. 5618 Patentlaan 2  
 NL - 2280 HV Rijswijk  
 Tel. (+31-70) 340-2040, Tx. 31 651 epo nl.  
 Fax: (+31-70) 340-3016

Authorized officer

Cook, S

## INTERNATIONAL SEARCH REPORT

 Int'l Application No  
 PCT/IB2004/004069

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	LU T ET AL: "Characterization of a notable historic gem diamond showing the alexandrite effect" JOURNAL OF CRYSTAL GROWTH, NORTH-HOLLAND PUBLISHING CO. AMSTERDAM, NL, vol. 193, no. 4, 15 October 1998 (1998-10-15), pages 577-584, XP004144488 ISSN: 0022-0248 page 581, right-hand column	54
T	- & GIA Instruments UK LTD <a href="http://www.giaainstruments.co.uk/DiamondView">http://www.giaainstruments.co.uk/DiamondView</a> XP002324550 abstract	54-74
A	US 5 124 935 A (WALLNER ET AL) 23 June 1992 (1992-06-23) the whole document	54
A	EP 0 341 093 A (GERSAN ESTABLISHMENT) 8 November 1989 (1989-11-08) claim 8	54
A	WO 01/96634 A (DE BEERS INDUSTRIAL DIAMONDS LIMITED; SCARSBROOK, GEOFFREY, ALAN; MAR) 20 December 2001 (2001-12-20) cited in the application	
A	US 4 200 506 A (DRESCHHOFF, GISELA A M ET AL) 29 April 1980 (1980-04-29)	
A	US 6 391 215 B1 (SMITH JAMES GORDON CHARTERS ET AL) 21 May 2002 (2002-05-21)	
A	GB 2 332 651 A (* GERSAN ESTABLISHMENT) 30 June 1999 (1999-06-30)	
A	US 2003/223054 A1 (WARWICK MALCOLM RAYMOND) 4 December 2003 (2003-12-04)	
A	US 6 211 484 B1 (KAPLAN GEORGE R ET AL) 3 April 2001 (2001-04-03)	

## INTERNATIONAL SEARCH REPORT

 Int'l Application No  
 PCT/IB2004/004069

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 03014427	A	20-02-2003	WO 03014427 A1 CA 2456847 A1 EP 1415022 A1 JP 2004538230 T	20-02-2003 20-02-2003 06-05-2004 24-12-2004
US 2003205190	A1	06-11-2003	US 6582513 B1 US 2005056206 A1 US 2005056207 A1 US 2005056208 A1 US 2005056209 A1 US 2005061233 A1 US 2005066884 A1 US 2003131787 A1	24-06-2003 17-03-2005 17-03-2005 17-03-2005 17-03-2005 24-03-2005 31-03-2005 17-07-2003
US 6187213	B1	13-02-2001	AU 708323 B2 AU 6524796 A CA 2227185 A1 CN 1196018 A ,C DE 69618201 D1 DE 69618201 T2 EP 0839098 A1 ES 2166459 T3 WO 9703846 A1 GB 2319225 A ,B HK 1009786 A1 IL 118886 A JP 2000501652 T RU 2161093 C2 TW 380093 B US 2002108398 A1	29-07-1999 18-02-1997 06-02-1997 14-10-1998 31-01-2002 18-07-2002 06-05-1998 16-04-2002 06-02-1997 20-05-1998 20-04-2000 31-12-1999 15-02-2000 27-12-2000 21-01-2000 15-08-2002
US 4316385	A	23-02-1982	NONE	
US 5124935	A	23-06-1992	AT 109563 T AU 8926791 A WO 9209882 A1 DE 69103282 D1 DE 69103282 T2 EP 0559699 A1 HK 30797 A JP 6503166 T	15-08-1994 25-06-1992 11-06-1992 08-09-1994 16-03-1995 15-09-1993 21-03-1997 07-04-1994
EP 0341093	A	08-11-1989	AU 646719 B2 AU 1077692 A AU 646542 B2 AU 1077892 A AU 626860 B2 AU 3453989 A AU 630351 B2 AU 3454089 A AU 622665 B2 AU 3454189 A AU 622666 B2 AU 3454289 A AU 623140 B2 AU 3454389 A AU 622667 B2 AU 3454489 A	03-03-1994 14-05-1992 24-02-1994 14-05-1992 13-08-1992 09-11-1989 29-10-1992 09-11-1989 16-04-1992 09-11-1989 16-04-1992 09-11-1989 07-05-1992 09-11-1989 16-04-1992 09-11-1989

## INTERNATIONAL SEARCH REPORT

International Application No.

PCT/IB2004/004069

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
EP 0341093	A		BR	8902133 A	02-01-1990
			BR	8902134 A	02-01-1990
			BR	8902135 A	04-09-1990
			BR	8902136 A	04-09-1990
			BR	8902137 A	02-01-1990
			BR	8902138 A	02-01-1990
			CA	1334895 C	28-03-1995
			DE	341092 T1	16-08-1990
			DE	341093 T1	11-04-1991
			DE	341094 T1	11-04-1991
			DE	341095 T1	16-08-1990
			DE	341096 T1	11-04-1991
			DE	345949 T1	06-09-1990
			EP	0341092 A2	08-11-1989
			EP	0341093 A2	08-11-1989
			EP	0341094 A2	08-11-1989
			EP	0341095 A2	08-11-1989
			EP	0341096 A2	08-11-1989
			EP	0345949 A2	13-12-1989
			EP	0552819 A2	28-07-1993
			EP	0552820 A2	28-07-1993
			EP	0552821 A2	28-07-1993
			GB	2219394 A ,B	06-12-1989
			GB	2219078 A ,B	29-11-1989
			GB	2219079 A ,B	29-11-1989
			GB	2219080 A ,B	29-11-1989
			GB	2219081 A ,B	29-11-1989
			GB	2219082 A ,B	29-11-1989
			GB	2251305 A ,B	01-07-1992
			GB	2251306 A ,B	01-07-1992
			IN	174122 A1	17-09-1994
			IN	174123 A1	17-09-1994
			IN	174165 A1	01-10-1994
			IN	174124 A1	17-09-1994
WO 0196634	A	20-12-2001	AU	6624601 A	24-12-2001
			CA	2412855 A1	20-12-2001
			CN	1441859 A	10-09-2003
			CZ	20024228 A3	17-12-2003
			EP	1290251 A1	12-03-2003
			GB	2379451 A ,B	12-03-2003
			WO	0196634 A1	20-12-2001
			JP	2004503461 T	05-02-2004
			US	2004182308 A1	23-09-2004
			ZA	200210138 A	12-12-2003
US 4200506	A	29-04-1980	NONE		
US 6391215	B1	21-05-2002	AT	232476 T	15-02-2003
			AU	732638 B2	26-04-2001
			AU	7541298 A	11-12-1998
			CA	2291041 A1	26-11-1998
			CN	1265066 A ,C	30-08-2000
			DE	69811362 D1	20-03-2003
			DE	69811362 T2	16-10-2003
			EP	0984865 A1	15-03-2000
			ES	2190079 T3	16-07-2003
			GB	2361671 A ,B	31-10-2001

## INTERNATIONAL SEARCH REPORT

 Int. Application No  
 PCT/IB2004/004069

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
US 6391215	B1		GB	2325392 A	25-11-1998
			WO	9852774 A1	26-11-1998
			GB	2339727 A ,B	09-02-2000
			HK	1024211 A1	31-05-2002
			IL	124592 A	25-07-2002
			JP	2001527477 T	25-12-2001
			RU	2199447 C2	27-02-2003
			TW	495422 B	21-07-2002
			ZA	9804377 A	22-02-2002
			ZA	200201200 A	22-08-2002
GB 2332651	A	30-06-1999	AU	746557 B2	02-05-2002
			AU	1774399 A	19-07-1999
			CA	2316957 A1	08-07-1999
			CN	1284916 A ,C	21-02-2001
			DE	69820295 D1	15-01-2004
			DE	69820295 T2	21-10-2004
			EP	1042132 A1	11-10-2000
			ES	2212385 T3	16-07-2004
			WO	9933671 A1	08-07-1999
			HK	1020032 A1	19-04-2002
			JP	2001526996 T	25-12-2001
			RU	2215659 C2	10-11-2003
			TW	458836 B	11-10-2001
			ZA	9811838 A	23-06-2000
US 2003223054	A1	04-12-2003	AU	2003233705 A1	12-12-2003
			WO	03099054 A2	04-12-2003
US 6211484	B1	03-04-2001	US	5932119 A	03-08-1999
			US	2003019852 A1	30-01-2003
			US	6476351 B1	05-11-2002
			US	2004154825 A1	12-08-2004
			US	2004159641 A1	19-08-2004
			US	2005005642 A1	13-01-2005
			AU	699816 B2	17-12-1998
			AU	7736996 A	01-08-1997
			BR	9612467 A	13-07-1999
			CA	2238612 A1	17-07-1997
			CN	1425912 A	25-06-2003
			CN	1205663 A ,C	20-01-1999
			EP	1021271 A1	26-07-2000
			IL	124034 A	23-12-2001
			IL	140512 A	31-07-2003
			IL	140513 A	17-09-2003
			JP	3238875 B2	17-12-2001
			JP	9225659 A	02-09-1997
			JP	2002028793 A	29-01-2002
			RU	2205733 C2	10-06-2003
			WO	9725177 A1	17-07-1997